pproved For Release 2004/03/26 : CIA-RDP 78/105439A000400450036/1/ TOP SECRET NPIC/R-818/64 September 1964 8 Pages PHOTOGRAPHIC INTERPRETATION REPORT IZHEVSK ARMS AND MACHINERY EQUIPMENT PLANTS 71 AND 74. IZHEVSK, USSR NATIONAL PHOTOGRAPHIC INTERPRETATION CENTER



TOP SECRET

Declass Review by NGA.

			•
1-	TOP SECRET		
	. The state of th		
			NPIC/R-818/64
	•		• • •
₩	IZHEVSK ARMS A	ND MACHINERY	
		and the second of the second o	IICCD
EQUIP	MENT PLANTS 71 A	ND /4, IZHEVSK,	USSK
) :'	1.3		# · · · · · · · · · · · · · · · · · · ·
	, ,		
	اعداد التي المراسب الرابات	•	
-	SUMM.	ARY	· · · · · · · · · · · · · · · · · · ·
•			
ery Equipment Plants 71 reveals that expansion of assembly capacity is fabrication building see struction in of construction. The put duction building under of southwest of Plants 71	n in the midstage of con- lis now in a late stage resence of the new pro- construction immediately and 74, and the clearing immediately west of the	and 74, the large size of under construction and fabrication building in a installation 4 nautical may indicate a potentia duction capability.	ity of Plants 71 and 74. It photographic evidence roduction at Plants 71 if the production building the presence of a large
• • •	INTRODU	JCTION	
	Soviet armaments and	rocket sondes. 2/ I	Recent reports indicate
Two important	ants, Plant 71 and Plant		Plant 74 are currently
machine equipment pro	ne city of Izhevsk, USSR	involved in the Soviet	guided missile program.
(Figure 1) at 56-49-3	30N 53-10-25E. The two	Plant 71 has been asso	
anlants form a single in	ntegrated installation sit	with the Dnepropetrov	sk Missile Development
uated in the central	part of the city at the	and Production Center	(DMDPC), and the city
southern end of Izhe	vskiy Prud (pond). The		ted frequently by missile-
plants are about 20 n	autical miles (nm) north	associated aircraft. 3/	
of the main line of the	Trans-Siberian Railroad,	The Izhevsk Arms	and Machinery Equip-
and they are served	by a branch line leading	ment Plants / I and	74 were the subject of a
from Agryz to Kiroy.	1		interpretation report
During World Wa	ar II, Plants 71 and 74	based on poor-quality	coverage us-
produced infantry and	artillery weapons, and	Comparison of the 196	52 photography with most
it is reported to be th	ne second most important	comparison of the 190	veals that the installation
producer of small an	rms and machineguns in		
the USSR. 1/ Steel pro	oduced at this installation	is undergoing expansio	
is apparently utilized w	vithin the plants or by their	This report is bas	sed oil

raphy of

raphy is of very good quality and permits recog-

TOP SECRET

subsidiaries within the Izhevsk Complex (Fig-

ure 1). In 1960 Plant 74 markings were observed

on ground photographs of SZ-35L meteorological

٦	Ė		Ρ	S	F	\boldsymbol{c}	R	F	T
- 1		_		J	ᆫ	·	\mathbf{r}	ᆫ	

NPIC/R-818/64

nition of smoke stacks, steamlines, and rail lines; however, the resolution of this photography is still not high enough to permit recognition of materials in open storage, vehicles, and similar details.

Both the photography of Plants 71 and 74 has been examined for evidence of missile-related activity. While no direct evidence of this relationship has been detected, certain observations were made which may be pertinent. Major buildings

within the installation and nearby facilities are described in this report, and changes that have taken place are reported along with estimates, when possible, of the dates when such changes took place. Brief descriptions and dimensions of 16 major items within the installation are: presented in Table 1. Detailed information about support facilities, both within and adjacent to the plant area, and possibly associated installations in the Izhevsk area is presented in Table 2.

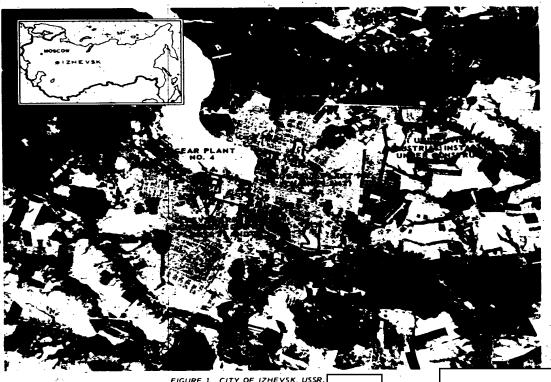


FIGURE 1. CITY OF IZHEVSK, USSR,

· · · · · · · · · · · · · · · · · · ·	TOP SECRET	Ì
	; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ; ;	
	IZHEVSK PLANTS 71 AND 74	

Plants 71 and 74 in Izhevsk are contained in a fenced area measuring about 3,300 by 3,700 feet and consist of approximately 16 major buildings and several smaller support buildings (Figures 2 and 3).

According to a collateral report released in 1951, 1/ the plant complex is divided administratively into two parts. Heavy industrial operations (iron and steel foundries, rolling mills, forges, workshops) are consolidated under the administration of Plant 71, and all armament production is under the administration of Plant 74. Apparently, this administrative division is also reflected in the physical layout of the plant complex, although there may be some overlapping of the various areas. Plant 71 (heavy industrial facilities) occupies the southern half . and some of the central part of the plant area. and Plant 74 (armaments fabrication facilities). occupies the northwestern quadrant of the area. facilities occupy the north-Uility/service eastern sector.

A comparison of the plant area as it appeared on the 1962 photography with its appearance on photography reveals that expansion of the plant's fabrication/assembly capacity is in progress. This is the first expansion noted on photography since the first coverage in 1962. A large fabrication building (item 16, Figure 2) measuring 750 by 555 feet was first seen in the midstage of construction on photography of As seen on the most recent photography the building is in the late stage of construction. Of possible significance is the fact that the first indication that a building was to be constructed appeared on photography of asan area of cleared buildings similar to a cleared area west of the plant seen on the photography (item c, Figure 3). Descriptions and dimensions of the major

Descriptions and dimensions of the major facilities of the two plants are presented in Table 1 which is keyed to Figure 2. All items except the new fabrication building (item 16) were present in

SUPPORT FACILITIES AND POSSIBLY RELATED AREAS

A number of support facilities and other related areas are located within and near the fenced area containing Plants 71 and 74. These facilities and areas are described in some detail in Table 2 which is keyed to Figure 3; only those of special interest are discussed in the following paragraphs.

Clearing of residential buildings is taking place west of the plant area (item c, Figure 3), and this may be indicative of future industrial expansion.

An unidentified facility is under construction in an area southwest of Plants 71 and 74 (item J). Three support-type buildings have

been constructed since and a new production building has been constructed since. This facility is rail served by a branch of the same spur that serves Plants 71 and 74, but it lacks a direct link with those plants. This facility has 221,075 square feet of roof coverage.

Two unidentified mechanical process buildings are located at the end of a rail-served freight vard (item J). The elaborate conveyer system indicates some type of bulk material handling. This area is connected to the main plant by a steamline but lacks any other physical connection.

- 3	, -	Г	
	37	:	
OP SECRET		·	
0. 0202.			

SECRET	

NPIC/R-818/64

Table 1. Descriptions of Major Facilities of Izhevsk Arms and Machinery Equipment Plants 71 and 74

1	Item	Description \	Dimensions (ft)	Roof Cover (#q ft)
leg	1	Fabrication assembly building	840 x 215	150,600
leg	2	Machine workshop building, U-shaped	base 724 x 95	65,750
Fabrication assembly huilding			leg 230 x 55	12,650
Fabrication assembly building	•		de leg = 225 x 55	
Possible machine shop	* 1.			93,605
Possible machine shop	1 1 mag	e	455 4005	194 338
Fabrication assembly building 550 x 350 192,500	ry 🐔		433 X 2#3	104,223
Probable special products steel mill, product unknown a 710 x 65 46,150 b 465 x 65 30,226 c 533 x 65 34,775 d 280 x 65 15,200 128,330	CAR.	Possible machine shop	irregular	103,500
b	5	Fabrication assembly building	550 x 350	192,500
b	6	Probable special products steel mill, product unknown	a 710 x 65	46.150
The steel rolling mill section 1.00 1.	Ÿ.		b 465 x 65	30,226
Total Tota			c 535 x 65	34,775
The state of the section Steel rolling mill section Steel rolling mi			d 280 x 65], 15,200
b irregular 25,850 39,900 d d irregular 41,375 34,600 237,600 23				129,350
b irregular 25,850 39,900 d irregular 41,375 34,600 237,60	7.	General turnous workshop strengs building	n 1 175 v 65	76 875
6: Possible special products steel mill, product unknown irregular	•	General pulpose workshop storage transmig		
d				
Possible special products steel mill, product unknown		•		
16,500 237,6	The Control of the Co		e irregular	34,600
Possible special products steel mill, product unknown irregular 52,500	10		f irregular	
Probable special products steel mill, product unknown irregular 114,925 10 Possible wire mill irregular 170,400 11 Steel rolling milt and fabrication section a - probable fabrication packing section 370 x 350 129,500 b - rolling mill section 455 x 140 66,320 c - rolling mill section irregular 55,500 d - rolling mill section 815 x 220 179,300 e - possible blooming slab mill section irregular 62,900 f - soaking pits 640,695 12 Probable foundry building, three stacks irregular 118,900 13 Possible foundry electric furnace building irregular 172,625 14 Possible storage building 720 x 120 86,400 15 Probable open hearth building irregular 175,000	3		4	237,600
10 Possible wire mill	6 :	Possible special products steel mill, product unknown	irregular	52,500
11 Steel rolling milt and fabrication section 370 x 350 129,500	2.5	Probable special products steel mill, product unknown	irregular	. 114,925
a - probable fabrication packing section 370 x 350 129,500 b - rolling mill section 485 x 140 66,320 c - rolling mill section 675,500 d - rolling mill section 615 x 220 179,300 e - possible blooming slab mill section 62,900 f - soaking pits 62,900 12 Probable foundry building, three stacks 177,000 13 Possible foundry felectric furnace building 172,625 14 Possible storage building 720 x 120 86,400 15 Probable open hearth building 175,000	10	Possible wire mill	irregular	170,400
b - rolling mill section 485 x 140 66,320 c - rolling mill section irregular 55,500 d - rolling mill section 815 x 220 179,300 d - rolling mill section 815 x 220 179,300 e - possible blooming slab mill section irregular 62,900 f - soaking pits 555 x 255 149,175 640,695 12 Probable foundry building, three stacks irregular 118,900 13 Possible foundry electric furnace building irregular 172,625 14 Possible storage building 720 x 120 66,400 15 Probable open hearth building irregular 175,000	11			
1	E 18 18 18 18 18 18 18 18 18 18 18 18 18			
d - rolling mill section 815 x 220 179,300 e - possible blooming slab mill section 179,300 f - soaking pits 555 x 255 149,175 12 Probable foundry building, three stacks 179,000 13 Possible foundry electric furnace building 172,625 14 Possible storage building 720 x 120 86,400 15 Probable open hearth building 175,000				
e - possible blooming slab mill section irregular 62,900 555 x 255 149,175 640,695	.8.34			
12 Probable foundry building, three stacks 175,000 15 Probable open hearth building 175,000	Jan 1913			
12 Probable foundry building, three stacks irrigular 115,900 13 Possible foundry electric furnace building irregular 172,625 14 Possible storage building 720 x 120 86,400 15 Probable open hearth building irregular 175,000				
12 Probable foundry building, three stacks irregular 116,900 13 Possible foundry electric furnace building irregular 172,625 14 Possible storage building 720 x 120 86,400 15 Probable open hearth building irregular 175,000		1 - Someting pits	200 X 200	
14 Possible storage building 720 x 120 86,400 15 Probable open hearth building irregular 175,000	12	Probable foundry building, three stanks	irregular	
15 Probable open hearth building irregular 175,000	13	Possible foundry electric furnace building	irregular	172,625
	14	Possible storage building	720 x 120	56,400
	15_	Probable open hearth building	irregular	175,000
	16	Fabrication assembly building	750 x 555	416,250

TOP SECRET

NPIC/R-818/64

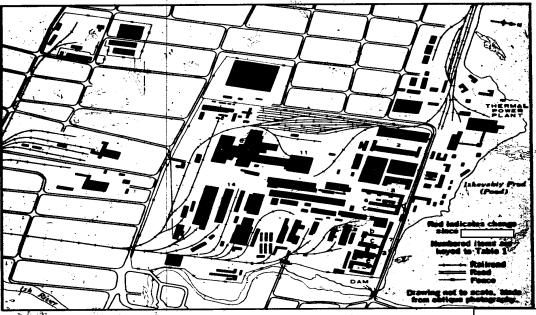


FIGURE 2. YZHEVSK ARMS AND MACHINERY EQUIPMENT PLANTS 71 AND 74.

SUBSIDIARY PLANTS OF IZHEVSK ARMS PLANTS 71 AND 74

Plants 71 and 74 are reported to be the main elements of the arms complex located in Izhevsk. Several subsidiary plants that receive steel and other products from and, in turn, supply components to Plants 71 and 74 are scattered about the city (Figure 1).

The largest of the subsidiaries is the lzhevsk. Arms Plant 622 situated approximately 1.6 nm southeast from the main plant. Plant 622 is a light fabrication-type industrial plant containing three large production buildings, two large machine/workshop buildings, and several small utility support buildings.

Another major subsidiary is the Chain Plant 85, which is probably located about 0.5

nm northeast of the main plant (Figure 1). The plant is categorized as a light fabrication industry and consists of one production building, five machine/workshop buildings, and several smaller support structures.

Gear Plant No 4 is the subsidiary located nearest the main arms plant. It is just west of the fabrication section of Plant 74 (Figure 3). This light fabrication industry consists basically of one large production building and a number of smaller support buildings.

A new unidentified industrial installation under construction is located approximately 4 nm northeast of Plants 71 and 74. This instal-

TOP SECRET

PIC./R-818/64

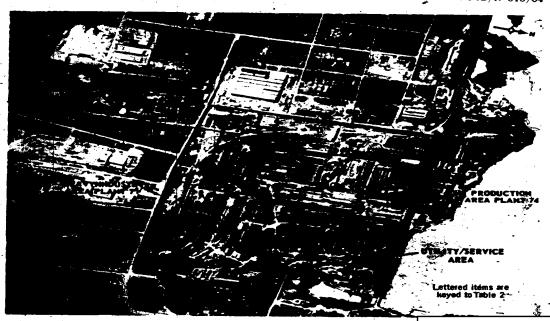


FIGURE 3. IZHEVSK ARMS AND MACHINERY EQUIPMENT PLANTS 71 AND 74,

lation contains a large production building which has approximately 672,000 square feet of roof cover. The roof of this building is in two levels; the higher portion is not of sufficient height to be considered a high bay section, but the high section does contain two large monitors indicative of large traveling cranes which would provide a capability for handling large, rather

tall objects. A tall building estimated to be 75 feet in height located just east of the large building has been constructed since. The purpose of this building is not known at present; however, its height and the cluttered appearance of the roof imply a specialized function which may be determined when the installation is complete and operating.

CONCLUSIONS

Although excellent coverage of Plants-71 and 74 has been obtained, there is not yet sufficient photographic evidence to relate these plants directly to the Soviet missile program.

The design and dimensions (750 by 555 feet) of the new building in the southwest corner of the plant area (item 16, Figure 2) are such that the building can be identified with the light fabrication industry of which missile/airframe

TOP SECRET

.

•						
TO	Ρ	S	E	C	R	ET

NPIC/R-818/64

Item	- Identification	45	Description	
A B C D E F G H	Izhevsk Thermat Power Plan Gear Plant No. 4 Cleared Area Rail classification and hold	One far Six sm Other s Reside future future Eight v Ten w Steam Numer Two L Roads ke gas Eight Bulk n Open Thrée sinc One n Large Occess Two l elab	ous small support buildings -shaped storage sheds -erved open storage area storage support buildings naterials handling facility storage yards warehouse-type buildings (two constra	ucted

manufacture is a part, and this facility is considered at least potentially capable of housing such a manufacturing function.

The large building (1,120 by 605 feet) in the unidentified industrial installation (Figure 1) 4 nm northeast of Plants 71 and 74 can also

be identified with the light fabrication industry; on the basis of its appearance in the present stage of its development, it should also be considered as being potentially capable of missile/airframe production.

7 -

<u> </u>	TOP SE	CRET	•		÷	
	10/32	.CKL1				
			•	•		
•	┛ .,	•		1	PIC/R-818/6	4 .
21	•	REFERE!	NCES	, e - '4		<u> </u>
						ľ
			4.			1 ,
AAPS OR CHARTS	***	• • •	v v ·	2		
ACIC. US Air Target C						
ACIC. US Air Complex	Chart, Series 25, She	eet 0155-9995-02	5A, 1st ed, Nov 63, s	cale 1:25,000 (SEC	RET)	
<u>.</u>			•		•	٠,
DOCUMENTS				171 166B at 1	- ti «ECDEM	
1, USAF USTIS 0155-0					_	
2. NPIC R-162 62, Iz				• • • • • • • • • • • • • • • • • • • •	(TOP SECRET	
3. USAFSS. SWESUM	64-01, Special Weap		Jan 64 (TOP SECRE			
REQUIREMENT	5	æ 1.		-1		
CIA. C-RR4-61,538			•.	*		
NPIC PROJECT	•		e e	-,	*	
N-723./64		1500	-		a.	
		12 .	÷			•
•				• .		7
	Fig		;			
			• •			, J .
			2.			
		TE .	2.	4	•	
			? ?	i		
a						
# 1.0 - 1		· · · · · · · · · · · · · · · · · · ·	?• ?•			
4 . a.		*	?.	**************************************		
4. · · ·				24		
÷				n, -		
# To a local district of the control			,	×.		
			?.	4		
7.			•	**		
4 · · ·			•	×		